

General Chemicals

Acetic Acid (Glacial)



CH₃COOH M.W. 60.05 Assay < 99.8%

A026 1ltr

n, Acetyl-L-Cysteine

Mucolytic agent used in studies of cell surface coats
Ito, J. Cell Biol., 27, 475 (1965)
Kelly, J. Cell Biol., 28, 51 (1966)

A003 10g

Acetyl Thiocholine Iodide

See Enzyme substrate section

Activated Charcoal



C047 500g



Aluminium Potassium Sulphate

M.W.474.38

A027 1Kg

Ammonium Tartrate

M.W. 184.15

A028 100g

Calcium Chloride Granular



C036 500g

Celloidin



Moistened with 35% Ethanol

C049 100g

Cellosolve



(2-Ethoxyethanol) C₄H₁₀O₂ M.W. 90.12

C048 250ml

Chromium Trioxide EM



Used after periodic acid oxidation and followed by silver methenamine for the detection of complex carbohydrates in cisternae of the Golgi Apparatus.
Rambourg et al., J. Cell Biol., 40, 395 (1969)
Also a component of chrome osmium fixatives.
Dalton, Anat. Rec., 121, 281 (1955)



C009 100g

Cupric Sulphate EM



C016 100g

Deuterium Oxide (heavy water)

Tilney, Devl. Biol., 2(suppl.) 63 (1968)
Burgess & Northcote, J. Cell Sci., 5, 433 (1969)

D006 10g

4,4'-Difluoro-3,3'-Dinitrodiphenylsulphone

Bifunctional reagent used to prepare ferritin or peroxidase labelled anti-bodies for the localisation of antigens by EM.

D016 1g

Digitonin

$C_{56}H_{92}O_{29}$ M.W. 1229.34
Used in aldehyde fixatives to retain cholesterol in tissues embedded for EM
Scallen & Dietert, J. Cell Biol., 40, 802 (1969)
Temkin R.J. Microscopy Res. & Tech., 26, 260-271 (1993)

D017 1g

p-Dimethylaminobenzaldehyde

$C_9H_{11}NO$ M.W. 149.2

D039 50g

EDTA disodium salt EM

Ethylenediamine tetraacetic Acid.
 $Na_2C_{10}H_{14}N_2O_8 \cdot 2H_2O$ M.W. 372.20

Used in the decalcification of tissue for EM.

Warshawsky & Moore, J. Histochem. Cytochem., 15, 542 (1967)

Used as an agent affecting capillary permeability.

Clementi & Palade, J. Cell Biol., 42, 706 (1969)

Used in the preparation of isolated liver parenchymal cells.

Berry & Friend, J. Cell Biol., 43, 506 (1969)

Used in selective staining method for ribonucleoproteins.

Bernard, J. Ultrastruct. Res., 27, 250 (1969)

Monneron & Bernard, J. Ultrastruct. Res., 27, 266 (1969)

E001 100g

D-Glucose EM

Anhydrous

G009 500g

Gold Chloride – Brown

G200 1g

Gold Chloride- Yellow

Sodium Tetrachloroaurate. M.W. 397.80

G049 1g

Hexamine

(Hexamethylenetetramine) see M006 Methenamine in EM stain section- page C26

Hydrogen Peroxide 30% - EM

100 volumes. M.W. 34.01



H006 100ml

Hydroquinone

$C_6H_6O_2$ M.W. 110.11 Assay >99%

H037 100g

Lead Acetate EM

See EM stain section

Lead Nitrate EM

See EM stain section

Mercuric Chloride EM

M005 100g

Molecular Sieve Type 3A

Type 3A molecular sieves should be used to dry dehydration solvents for electron microscopy. Most common solvents (acetone, ethanol, methanol, etc.) need to be anhydrous for electron microscopy embedding work using epoxy resins, yet they have a tendency to pick up atmospheric water when bottles are opened. It is highly recommended that all dehydrating solvent bottles are topped up after use to minimise the air volume above the liquid.

M032 Molecular sieve type 3A 500g
M032!! Molecular sieve type 3A 1Kg

Paraldehyde



$C_6H_{12}O_3$ M.W. 132.16

P037 5 x 5ml

Periodic Acid



ACS, Crystallised: >99.5%

P039 100g



Periodic Acid 50%- EM



H_5IO_6 M.W. 227.96

Mowry, R.W. J. Histochem. Cytochem., 7, 288 (1959)

Ainsworth, S.K. et al., J. Histochem. Cytochem., 20, 995 (1972)

Derenzini et al., J. Histochem. Cytochem., 34, 1161 (1986)

Tsuchiya & Ogawa, J. Electr. Microsc. 22, 290 (1973)

P005 25ml

Phenol



C_6H_5OH M.W. 94.11

P038 100g

Phosphorous Pentoxide granular



A mixture of phosphorous pentoxide and inert carrier material specially prepared for use in desiccators. The material remains free flowing after absorbing its own weight in water.

Without indicator

P027 500ml

With indicator

P028 500ml

Picric Acid



Moistened with water ~40%. $C_6H_3N_3O_7$ M.W. 229.11

P036 25g



Potassium Chloride

KCL M.W. 74.55

P035 500g

Potassium Ferricyanide EM

$K_3Fe(CN)_6 \cdot 3H_2O$ M.W. 329.25

Used in cytochemical staining procedures for the ultrastructure localisation of cholinesterase and of various dehydrogenases.

P018 100g

Potassium Metabisulphite



(di-Potassium disulphite) $K_2S_2O_5$ M.W. 222.31

P034 500g



Reagent for the ultrastructural localisation of sodium. M.W. 507.78

Zadunaisky, J. Cell Biol., 31, C11 (1966)

Kaye et al., J. Cell Biol., 30, 237 (1966)

Spicer et al., J. Cell Biol., 39, 216 (1968)

Lane & Martin, J. Histochem. Cytochem., 17, 102 (1969)

Tandler et al., J. Cell Biol., 45, 355 (1970)

J.Histochem. Cytochem., 24, 740 (1976)

P017 100g

RDC Rapid Decalcifier



For use with human and animal calcified tissue, bone, cartilage and other hard specimens. Protects cellular structure with minimal interference with subsequent staining.

D037 1ltr

Silica Gel

Self indicating supplied as 6-20 mesh.

S041 500g

Self indicating coarse

S042 500g**Silica Gel in sachets**

Small 5 gram sachets filled with free flowing self indicating grade silica gel.

S045 100 sachets**Sodium Hydroxide - pearl**

NaOH M.W. 40.00

S459 250g**Sodium Metaperiodate**NaIO₄ M.W. 213.89**S461 25g****Sodium Methoxide**CH₃ONa M.W. 54.02 Assay > 95%**S465 100g****Sodium Nitrate EM****S018 500g****Sodium Sulphite**Na₂SO₃ M.W. 126.04**S462 500g****Sodium Tetraphenyl Boron**

Used for dissociation of tissue into single cells.
 Rappaport & Howze, Proc. Soc. Exp. Biol. Med.,
 121, 1010 (1966)
 Mills & Zucker-Franklin, Amer. J. Path., 54, 147
 (1969)

S022 1g**Sucrose EM****S025 500g****Thiocarbohydrazide EM**

See EM staining section.

Thiosemicarbazide EM

See EM staining section.

Thionin

M.W. 287.34

T256 5g

Thymol



C10H14O M.W. 150.22

T257 100g

Toluene-2,4-Diisocyanate



Reagent for cross-linking ferritin to antibodies.
Singer & Schick, J. Biophys. Biochem. Cytol., 9, 519 (1961)
Schick & Singer, J. Biol. Chem., 236, 2477 (1961)

T012 100ml

Triethyl Phosphate



(C₂H₅O)₃P(O) M.W. 182.16 Assay >99%

T258 25g

Triton X-100



T019 500g

Uranyl Nitrate EM



Said to prevent polymerisation damage during embedding in methacrylates. Also used as a negative stain.

This product is subject to shipping regulations and **may not** be available for overseas destinations.

Ward, J. Appl. Phys., 30, 2039 (1959)

Pease, Histological Tech. For EM 2nd ed., Academic Press, New York p105 (1964)

Valentine & Home in the Interpretation of Ultrastruc., Academic Press, New York p203 (1962)

U004 25g

Surfactant & Dispersing Agents

Decon 90™



General purpose surfactant especially suitable for biological and radioactive work. Decon 90 is biodegradable.

C209 5ltr

Decon Neutracon



A near neutral cleaning concentrate. A phosphate free biodegradable neutral laboratory equipment cleaner, ideal for cleaning alkali sensitive materials such as aluminium

C215 5ltr

RBS25



Surfactant and cleaning agent.

R005 5Kg
R006 1Kg

RBS50



A non foaming surfactant and cleaning agent.

R012 1Kg

Tween™ 80

Polyoxyethylene sorbitanmonooleate

T260 100ml